

Work Order ID 152870

Tuesday, November 08, 2016 8:29:40 AM

152870

Page 1

Item ID: D2712 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Set Screw
 Start Date: 10/31/2016 Start Qty: 50.00 ***50*** Cust Item ID:
 Required Date: 11/7/2016 Req'd Qty: 50.00 ***50*** Customer:
 Reference:

Approvals: Process Plan: DAS 21 9-89 Date: NOV 08 2016 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2712	Rev B								
100	PURCHASING	0.00							
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>34337</u> For Hex Head Set Screw P/N: 92311A599 as per Dwg D2712 Thread: 5/16-24UNF Length: 5/8" long SS Possible Supplier: McMaster Material release note is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.17							
Packaging	Ensure material release note is attached								
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							
Quality Control									

50 NOV 16 2016 DAS 13 9-89

50x SP/6-11-21

50 NOV 22 2016 DAS 38 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective : .				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 152870***152870***

Page 2

Tuesday, November 08, 2016 8:29:40 AM

Item ID: D2712

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Set Screw

Start Date: 10/31/2016 Start Qty: 50.00

50

Cust Item ID:

Required Date: 11/7/2016 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: STO10

0.00

130

Packaging

Memo

0.08

Packaging

50NOV 13 2016

DAS

6

9-89

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.83

Quality Control

16/11/24DAS
21
9-89

NOV 23 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
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Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition																			
				Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER : _____																					

Picklist Print

Tuesday, November 08, 2016 8:29:43 AM

Page 1

Work Order ID: 152870

152870

Parent Item: D2712

D2712

Parent Item Name: Set Screw

Start Date: 10/31/2016

Required Date: 11/7/2016

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP: C05.09.13ReformatKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
92311A599		Purchased	No			100	Each	0.0000	1	50			
92311A599									**				
SET SCREW													

50x sp/6-11-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

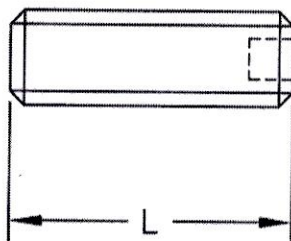
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					



DESIGN DS	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2712	REV. B SHEET 1 OF 1
DATE 05.05.04		TITLE SET SCREW	SCALE NTS
A	97.11.03	NEW ISSUE	
B	05.05.04	MATERIAL NOW SS ONLY	

RELEASED
05-09-06 *[Signature]*



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 152870 145
16-11-08

D2712 SET SCREW

- 1) TYPE: HEX SOCKET HEAD SET SCREW
- 2) THREAD: 5/16"-24 (UNF)
- 3) LENGTH: L= 5/8" TO 3/4"
- 4) MATERIAL: STAINLESS STEEL

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO34337

Purchase Order Date 11/16/2016

PO Print Date 11/16/2016

Page Number 2 of 6

Order From :

VU-MCM001

Ship To : DART AEROSPACE LTD

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

330 995 5500

Ship To Contact

Ship To Phone

Ship Via:

Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Total: \$190.50

4	53485K22	Hose Fitting	11/18/2016	FN	5.00	\$2.56	\$12.81
			Yes		Each		
			11/18/2016				

AS PER DWG D5421 REV. A
B153284

Line Total: \$12.81

5	91525A120	washer	11/18/2016		50.00	\$0.25	\$12.52
			Yes		Each		
			11/18/2016				

AS PER DWG D3456 REV. A
B152842

Line Total: \$12.52

6	92311A599	SET SCREW	11/18/2016		50.00	\$0.20	\$10.13
			Yes		Each		
			11/18/2016				

AS PER DWG D2712 REV. B
B152870

DAS
38
-89

NOV 21 2016

DAS
26
9-89

Note:

11/16/2016



11/16/2016

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO34337

Order Placed By
Chantal Lavoie

McMaster-Carr Number
3452355-03

Line	Product	Ordered	Shipped
1	91249A146 Black-Oxide Finish Pan Head Phillips Machine Screw 18-8 Stainless Steel, 6-32 Thread, 3/8" Length, Packs of 100	1 Pack	1 ✓
3	59915K274 PTFE-Lined Stainless Steel Ball Joint Rod End 3/8"-24 RH Male Shank, 3/8" Ball ID, 1-1/4" Long Thread	10 Each	10
4	53485K22 Push-on Brass Barbed Hose Fitting 1/4" ID, 7/16"-20 UNF 37 & 45 Degree Female Flared End, Packs of 5	1 Pack	1
5	91525A120 316 Stainless Steel Washer Oversized, 1/4" Screw Size, 0.281" ID, 1" OD, Packs of 25	2 Packs	2
6	92311A599 18-8 Stainless Steel Cup Point Set Screw 5/16"-24 Thread, 5/8" Long, Packs of 50	1 Pack	1
7	6605K56 Hook and Loop Cable Ties 24" Overall Length, Meets UL 94V2, Packs of 5	2 Packs	2
8	54895T44 Hooks for Protective Curtains, Packs of 10	3 Packs	3
10	5547T5 Chemical Resistant PVC/Polyurethane Work Boot Safety Toe, 15" High, Black, Steel Shank, Men's Size 12	1 Pair	1
11	24215T61 Light Duty Caster with Hood 2" Nylon Wheels, 3/8" x 1" Friction Stem	10 Each	10
12	7510A653 Plastic Syringe with Luer Lock Tip, 0.34 oz. Capacity, Packs of 10, Gary	10 Packs	10
13	6641A41 Loctite Gasket Maker #598, 2.36 oz. Tube	10 Each	10

NOV 21 2016

DAS
26
9-19DAS
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9-19

Shipped separately from our Chicago warehouse on 11/16

9	8841A21 Multi-Diameter Step Drill Bit High-Speed Steel, 13 Sizes, 1/8"-1/2", 1/4" Shank Diameter, 1/8" Maximum Thickness	4 Each	4
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